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Sequence Listing was accepted.

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Application No: 10575932 Version No: 1.0

Input Set:

Output Set:

Started: 2007-07-26 10:19:36.339
Finished: 2007-07-26 10:19:40.143
Elapsed: 0 hr(s) 0 min(s) 3 sec(s) 804 ms
Total Warnings: 11
Total Errors: 0
No. of SeqIDs Defined: 31
Actual SeqID Count: 31

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SEQUENCE LISTING

<110> Rao, Anjana
Hogan, Patrick G.
Heissmeyer, Vigo

<120> Modulation of Anergy and Methods for Isolating Anergy-Modulating Compounds

<130> 10861-033US1

<140> 10575932

<141> 2007-07-26

<150> US 10/575, 932

<151> 2006-04-14

<150> PCT/US04/09647

<151> 2004-03-29

<150> US 60/512,235

<151> 2003-10-17

<160> 31

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 862

<212> PRT

<213> *Homo sapiens*

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35 40 45

Gly Gln Ser Lys Lys Thr Glu Lys Cys Asn Asn Thr Asn Ser Pro Lys
50 55 60

Trp Lys Gln Pro Leu Thr Val Ile Val Thr Pro Val Ser Lys Leu His
65 70 75 80

Phe Arg Val Trp Ser His Gln Thr Leu Lys Ser Asp Val Leu Leu Gly
85 90 95

Thr Ala Ala Leu Asp Ile Tyr Glu Thr Leu Lys Ser Asn Asn Met Lys
 100 105 110

Leu Glu Glu Val Val Val Thr Leu Gln Leu Gly Gly Asp Lys Glu Pro
 115 120 125

Thr Glu Thr Ile Gly Asp Leu Ser Ile Cys Leu Asp Gly Leu Gln Leu
 130 135 140

Glu Ser Glu Val Val Thr Asn Gly Glu Thr Thr Cys Ser Glu Ser Ala
 145 150 155 160

Ser Gln Asn Asp Asp Gly Ser Arg Ser Lys Asp Glu Thr Arg Val Ser
 165 170 175

Thr Asn Gly Ser Asp Asp Pro Glu Asp Ala Gly Ala Gly Glu Asn Arg
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Arg Val Ser Gly Asn Asn Ser Pro Ser Leu Ser Asn Gly Gly Phe Lys
195 200 205
Pro Ser Arg Pro Pro Arg Pro Ser Arg Pro Pro Pro Pro Thr Pro Arg
210 215 220
Arg Pro Ala Ser Val Asn Gly Ser Pro Ser Ala Thr Ser Glu Ser Asp
225 230 235 240
Gly Ser Ser Thr Gly Ser Leu Pro Pro Thr Asn Thr Asn Thr Asn Thr
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Ser Glu Gly Ala Thr Ser Gly Leu Ile Ile Pro Leu Thr Ile Ser Gly
260 265 270
Gly Ser Gly Pro Arg Pro Leu Asn Pro Val Thr Gln Ala Pro Leu Pro
275 280 285
Pro Gly Trp Glu Gln Arg Val Asp Gln His Gly Arg Val Tyr Tyr Val
290 295 300
Asp His Val Glu Lys Arg Thr Thr Trp Asp Arg Pro Glu Pro Leu Pro
305 310 315 320
Pro Gly Trp Glu Arg Arg Val Asp Asn Met Gly Arg Ile Tyr Tyr Val
325 330 335
Asp His Phe Thr Arg Thr Thr Trp Gln Arg Pro Thr Leu Glu Ser
340 345 350
Val Arg Asn Tyr Glu Gln Trp Gln Leu Gln Arg Ser Gln Leu Gln Gly
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Phe Ala Thr Ser Gln Ser Lys Glu Phe Asp Pro Leu Gly Pro Leu Pro
385 390 395 400
Pro Gly Trp Glu Lys Arg Thr Asp Ser Asn Gly Arg Val Tyr Phe Val
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420 425 430
Gln Leu Asn Glu Lys Pro Leu Pro Glu Gly Trp Glu Met Arg Phe Thr
435 440 445
Val Asp Gly Ile Pro Tyr Phe Val Asp His Asn Arg Arg Thr Thr Thr
450 455 460
Tyr Ile Asp Pro Arg Thr Gly Lys Ser Ala Leu Asp Asn Gly Pro Gln
465 470 475 480
Ile Ala Tyr Val Arg Asp Phe Lys Ala Lys Val Gln Tyr Phe Arg Phe
485 490 495
Trp Cys Gln Gln Leu Ala Met Pro Gln His Ile Lys Ile Thr Val Thr
500 505 510
Arg Lys Thr Leu Phe Glu Asp Ser Phe Gln Gln Ile Met Ser Phe Ser
515 520 525
Pro Gln Asp Leu Arg Arg Arg Leu Trp Val Ile Phe Pro Gly Glu Glu
530 535 540
Gly Leu Asp Tyr Gly Gly Val Ala Arg Glu Trp Phe Phe Leu Leu Ser
545 550 555 560
His Glu Val Leu Asn Pro Met Tyr Cys Leu Phe Glu Tyr Ala Gly Lys
565 570 575
Asp Asn Tyr Cys Leu Gln Ile Asn Pro Ala Ser Tyr Ile Asn Pro Asp
580 585 590
His Leu Lys Tyr Phe Arg Phe Ile Gly Arg Phe Ile Ala Met Ala Leu
595 600 605
Phe His Gly Lys Phe Ile Asp Thr Gly Phe Ser Leu Pro Phe Tyr Lys
610 615 620
Arg Ile Leu Asn Lys Pro Val Gly Leu Lys Asp Leu Glu Ser Ile Asp

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Pro	Glu	Phe	Tyr	Asn	Ser	Leu	Ile	Trp	Val	Lys	Glu	Asn	Asn	Ile	Glu
645	650	655													
Glu	Cys	Asp	Leu	Glu	Met	Tyr	Phe	Ser	Val	Asp	Lys	Glu	Ile	Leu	Gly
660	665	670													
Glu	Ile	Lys	Ser	His	Asp	Leu	Lys	Pro	Asn	Gly	Gly	Asn	Ile	Leu	Val
675	680	685													
Thr	Glu	Glu	Asn	Lys	Glu	Glu	Tyr	Ile	Arg	Met	Val	Ala	Glu	Trp	Arg
690	695	700													
Leu	Ser	Arg	Gly	Val	Glu	Glu	Gln	Thr	Gln	Ala	Phe	Phe	Glu	Gly	Phe
705	710	715													720
Asn	Glu	Ile	Leu	Pro	Gln	Gln	Tyr	Leu	Gln	Tyr	Phe	Asp	Ala	Lys	Glu
725	730	735													
Leu	Glu	Val	Leu	Leu	Cys	Gly	Met	Gln	Glu	Ile	Asp	Leu	Asn	Asp	Trp
740	745	750													
Gln	Arg	His	Ala	Ile	Tyr	Arg	His	Tyr	Ala	Arg	Thr	Ser	Lys	Gln	Ile
755	760	765													
Met	Trp	Phe	Trp	Gln	Phe	Val	Lys	Glu	Ile	Asp	Asn	Glu	Lys	Arg	Met
770	775	780													
Arg	Leu	Leu	Gln	Phe	Val	Thr	Gly	Thr	Cys	Arg	Leu	Pro	Val	Gly	Gly
785	790	795													800
Phe	Ala	Asp	Leu	Met	Gly	Ser	Asn	Gly	Pro	Gln	Lys	Phe	Cys	Ile	Glu
805	810	815													
Lys	Val	Gly	Lys	Glu	Asn	Trp	Leu	Pro	Arg	Ser	His	Thr	Cys	Phe	Asn
820	825	830													
Arg	Leu	Asp	Leu	Pro	Pro	Tyr	Lys	Ser	Tyr	Glu	Gln	Leu	Lys	Glu	Lys
835	840	845													
Leu	Leu	Phe	Ala	Ile	Glu	Glu	Thr	Glu	Gly	Phe	Gly	Gln	Glu		
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<210> 2

<211> 854

<212> PRT

<213> Mus musculus

<400> 2

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Val	Glu	Val	Thr	Val	Asp	Gly	Gln	Ser	Lys	Lys	Thr	Glu	Lys	Cys	Asn
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Asn	Thr	Asn	Ser	Pro	Lys	Trp	Lys	Gln	Pro	Leu	Thr	Val	Ile	Val	Thr
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Pro	Thr	Ser	Lys	Leu	Cys	Phe	Arg	Val	Trp	Ser	His	Gln	Thr	Leu	Lys
65	70	75													80
Ser	Asp	Val	Leu	Leu	Gly	Thr	Ala	Gly	Leu	Asp	Ile	Tyr	Glu	Thr	Leu
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Lys	Ser	Asn	Asn	Met	Lys	Leu	Glu	Glu	Val	Val	Met	Thr	Leu	Gln	Leu
100	105	110													
Val	Gly	Asp	Lys	Glu	Pro	Thr	Glu	Thr	Met	Gly	Asp	Leu	Ser	Val	Cys
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Leu	Asp	Gly	Leu	Gln	Val	Glu	Ala	Glu	Val	Val	Thr	Asn	Gly	Glu	Thr
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Ser	Cys	Ser	Glu	Ser	Thr	Thr	Gln	Asn	Asp	Asp	Gly	Cys	Arg	Thr	Arg
145	150	155													160
Asp	Asp	Thr	Arg	Val	Ser	Thr	Asn	Gly	Ser	Glu	Asp	Pro	Glu	Val	Ala

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180	185	190
Ser Asn Gly Gly Phe Lys Pro Ser Arg Pro Pro Arg Pro Ser Arg Pro		
195	200	205
Pro Pro Pro Thr Pro Arg Arg Pro Ala Ser Val Asn Gly Ser Pro Ser		
210	215	220
Thr Asn Ser Asp Ser Asp Gly Ser Ser Thr Gly Ser Leu Pro Pro Thr		
225	230	235
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245	250	255
Ile Ile Pro Leu Thr Ile Ser Gly Gly Ser Gly Pro Arg Pro Leu Asn		
260	265	270
Thr Val Ser Gln Ala Pro Leu Pro Pro Gly Trp Glu Gln Arg Val Asp		
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Gln His Gly Arg Val Tyr Tyr Val Asp His Val Glu Lys Arg Thr Thr		
290	295	300
Trp Asp Arg Pro Glu Pro Leu Pro Pro Gly Trp Glu Arg Arg Val Asp		
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Asn Met Gly Arg Ile Tyr Tyr Val Asp His Phe Thr Arg Thr Thr Thr		
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Trp Gln Arg Pro Thr Leu Glu Ser Val Arg Asn Tyr Glu Gln Trp Gln		
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Leu Gln Arg Ser Gln Leu Gln Gly Ala Met Gln Gln Phe Asn Gln Arg		
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Phe Ile Tyr Gly Asn Gln Asp Leu Phe Ala Thr Ser Gln Asn Lys Glu		
370	375	380
Phe Asp Pro Leu Gly Pro Leu Pro Pro Gly Trp Glu Lys Arg Thr Asp		
385	390	395
Ser Asn Gly Arg Val Tyr Phe Val Asn His Asn Thr Arg Ile Thr Gln		
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Trp Glu Asp Pro Arg Ser Gln Gly Gln Leu Asn Glu Lys Pro Leu Pro		
420	425	430
Glu Gly Trp Glu Met Arg Phe Thr Val Asp Gly Ile Pro Tyr Phe Val		
435	440	445
Asp His Asn Arg Arg Ala Thr Thr Tyr Ile Asp Pro Arg Thr Gly Lys		
450	455	460
Ser Ala Leu Asp Asn Gly Pro Gln Ile Ala Tyr Val Arg Asp Phe Lys		
465	470	475
Ala Lys Val Gln Tyr Phe Arg Phe Trp Cys Gln Gln Leu Ala Met Pro		
485	490	495
Gln His Ile Lys Ile Thr Val Thr Arg Lys Thr Leu Phe Glu Asp Ser		
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Phe Gln Gln Ile Met Ser Phe Ser Pro Gln Asp Leu Arg Arg Arg Leu		
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Trp Val Ile Phe Pro Gly Glu Glu Gly Leu Asp Tyr Gly Gly Val Ala		
530	535	540
Arg Glu Trp Phe Phe Leu Leu Ser His Glu Val Leu Asn Pro Met Tyr		
545	550	555
Cys Leu Phe Glu Tyr Ala Gly Lys Asp Asn Tyr Cys Leu Gln Ile Asn		
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Pro Ala Ser Tyr Ile Asn Pro Asp His Leu Lys Tyr Phe Arg Phe Ile		
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Gly Arg Phe Ile Ala Met Ala Leu Phe His Gly Lys Phe Ile Asp Thr		
595	600	605
Gly Phe Ser Leu Pro Phe Tyr Lys Arg Ile Leu Asn Lys Pro Val Gly		
610	615	620

Leu Lys Asp Leu Glu Ser Ile Asp Pro Glu Phe Tyr Asn Ser Leu Ile
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 Trp Val Lys Glu Asn Asn Ile Glu Glu Cys Gly Leu Glu Met Tyr Phe
 645 650 655
 Ser Val Asp Lys Glu Ile Leu Gly Glu Ile Lys Ser His Asp Leu Lys
 660 665 670
 Pro Asn Gly Gly Asn Ile Leu Val Thr Glu Glu Asn Lys Glu Glu Tyr
 675 680 685
 Ile Arg Met Val Ala Glu Trp Arg Leu Ser Arg Gly Val Glu Glu Gln
 690 695 700
 Thr Gln Ala Phe Phe Glu Gly Phe Asn Glu Ile Leu Pro Gln Gln Tyr
 705 710 715 720
 Leu Gln Tyr Phe Asp Ala Lys Glu Leu Glu Val Leu Leu Cys Gly Met
 725 730 735
 Gln Glu Ile Asp Leu Asn Asp Trp Gln Arg His Ala Ile Tyr Arg His
 740 745 750
 Tyr Thr Arg Thr Ser Lys Gln Ile Met Trp Phe Trp Gln Phe Val Lys
 755 760 765
 Glu Ile Asp Asn Glu Lys Arg Met Arg Leu Leu Gln Phe Val Thr Gly
 770 775 780
 Thr Cys Arg Leu Pro Val Gly Gly Phe Ala Asp Leu Met Gly Ser Asn
 785 790 795 800
 Gly Pro Gln Lys Phe Cys Ile Glu Lys Val Gly Lys Glu Asn Trp Leu
 805 810 815
 Pro Arg Ser His Thr Cys Phe Asn Arg Leu Asp Leu Pro Pro Tyr Lys
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 Glu Gly Phe Gly Gln Glu
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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Tyr Asp Pro Met Asn Gly Val Leu Thr Ser Val Gln Thr Lys Thr Ile
 50 55 60
 Lys Lys Ser Leu Asn Pro Lys Trp Asn Glu Glu Ile Leu Phe Arg Val
 65 70 75 80
 His Pro Gln Gln His Arg Leu Leu Phe Glu Val Phe Asp Glu Asn Arg
 85 90 95
 Leu Thr Arg Asp Asp Phe Leu Gly Gln Val Asp Val Pro Leu Tyr Pro
 100 105 110
 Leu Pro Thr Glu Asn Pro Arg Leu Glu Arg Pro Tyr Thr Phe Lys Asp
 115 120 125
 Phe Val Leu His Pro Arg Ser His Lys Ser Arg Val Lys Gly Tyr Leu
 130 135 140
 Arg Leu Lys Met Thr Tyr Leu Pro Lys Thr Ser Gly Ser Glu Asp Asp
 145 150 155 160

Asn Ala Glu Gln Ala Glu Glu Leu Glu Pro Gly Trp Val Val Leu Asp
165 170 175
Gln Pro Asp Ala Ala Cys His Leu Gln Gln Gln Glu Pro Ser Pro
180 185 190
Leu Pro Pro Gly Trp Glu Glu Arg Gln Asp Ile Leu Gly Arg Thr Tyr
195 200 205
Tyr Val Asn His Glu Ser Arg Arg Thr Gln Trp Lys Arg Pro Thr Pro
210 215 220
Gln Asp Asn Leu Thr Asp Ala Glu Asn Gly Asn Ile Gln Leu Gln Ala
225 230 235 240
Gln Arg Ala Phe Thr Thr Arg Arg Gln Ile Ser Glu Glu Thr Glu Ser
245 250 255
Val Asp Asn Arg Glu Ser Ser Glu Asn Trp Glu Ile Ile Arg Glu Asp
260 265 270
Glu Ala Thr Met Tyr Ser Asn Gln Ala Phe Pro Ser Pro Pro Pro Ser
275 280 285
Ser Asn Leu Asp Val Pro Thr His Leu Ala Glu Glu Leu Asn Ala Arg
290 295 300
Leu Thr Ile Phe Gly Asn Ser Ala Val Ser Gln Pro Ala Ser Ser Ser
305 310 315 320
Asn His Ser Ser Arg Arg Gly Ser Leu Gln Ala Tyr Thr Phe Glu Glu
325 330 335
Gln Pro Thr Leu Pro Val Leu Leu Pro Thr Ser Ser Gly Leu Pro Pro
340 345 350
Gly Trp Glu Glu Lys Gln Asp Glu Arg Gly Arg Ser Tyr Tyr Val Asp
355 360 365
His Asn Ser Arg Thr Thr Trp Thr Lys Pro Thr Val Gln Ala Thr
370 375 380
Val Glu Thr Ser Gln Leu Thr Ser Ser Gln Ser Ser Ala Gly Pro Gln
385 390 395 400
Ser Gln Ala Ser Thr Ser Asp Ser Gly Gln Gln Val Thr Gln Pro Ser
405 410 415
Glu Ile Glu Gln Gly Phe Leu Pro Lys Gly Trp Glu Val Arg His Ala
420 425 430
Pro Asn Gly Arg Pro Phe Phe Ile Asp His Asn Thr Lys Thr Thr Thr
435 440 445
Trp Glu Asp Pro Arg Leu Lys Ile Pro Ala His Leu Arg Gly Lys Thr
450 455 460
Ser Leu Asp Thr Ser Asn Asp Leu Gly Pro Leu Pro Pro Gly Trp Glu
465 470 475 480
Glu Arg Thr His Thr Asp Gly Arg Ile Phe Tyr Ile Asn His Asn Ile
485 490 495
Lys Arg Thr Gln Trp Glu Asp Pro Arg Leu Glu Asn Val Ala Ile Thr
500 505 510
Gly Pro Ala Val Pro Tyr Ser Arg Asp Tyr Lys Arg Lys Tyr Glu Phe
515 520 525
Phe Arg Arg Lys Leu Lys Lys Gln Asn Asp Ile Pro Asn Lys Phe Glu
530 535 540
Met Lys Leu Arg Arg Ala